reference or "stop watch" signal to measure the actual local oscillator frequency. For example, in a CDMA network, a "short code" of 26 2/3 millisecond duration is broadcast on a pilot channel. The frequency of the short code rollover at 37.5 Hz can be used for synchronization. Alternatively, a "long code" broadcast on a CDMA network can also be used to synchronize a 10 MHz source. Each code has a starting point and an ending point indicated by a predetermined pattern. Similarly, in a GSM network, the Broadcast Control Channel (BCCH) transmitted by the base station includes a Synchronization Channel (SCH) having counts indicating the positions of the current frame within a multi-frame, super-frame and hyper-frame structures. The multi-frame, super-frame and hyper-frame structures have respective durations of 0.235 seconds, 6.12 seconds and approximately 3 hours and 29 minutes. Thus, in a GSM network, the starting points of successive ~~mult-frames~~ multi-frames can be used as fixed time intervals. Other intervals inherent in the GSM air-interface frame structure can also be used as fixed time intervals. In addition, a counter is provided in the hardware that is clocked by a clock signal generated from shared local oscillator 108. In one embodiment, a nominally 200 MHz signal from a PLL in positioning signal receiver 103 is used to clock the counter.

Please replace the paragraph beginning on page 9, line 1 with the following replacement paragraph:

Figure 4 illustrates method 400 for measuring the operating frequency of shared local oscillator 108 ~~103~~, in accordance with the present invention. As shown in Figure 4, step 401 detects a starting point in the selected reference signal from the base station. At step 402, when the starting point in the reference signal is detected, the counter is reset to enable count, incrementing one for each cycle of its input clock signal. In one embodiment, detecting the starting point and starting the counter can be accomplished by software running in CPU subsystem 131 ~~130~~. In other embodiments, these functions can be carried out in hardware. At step 403, when the ending point of the reference signal is detected, the counting is disabled. At that time, the count in the counter represents the number of clock cycles elapsed between the starting and ending point of the referenced signal (i.e., the fixed time interval). The frequency of shared local oscillator 108 is thus simply the count in the counter divided by this fixed time interval ~~this fixed time interval divided by the count in the counter~~. An adjustment to the count may be desirable to account for the latencies in signal detection and the counter operations for higher accuracy.